b) implanting said device in said host under conditions such that said device measures said glucose accurately for a period of time exceeding about 30 days to exceeding about 360 days.

31. (Amended) A method of measuring glucose in a biological fluid, comprising the steps of: providing i) a host, and ii) an implantable device comprising a sensor capable of continuous glucose sensing; implanting said device wholly subcutaneously in said host and transmitting data by telemetry from said wholly implantable device to an external device.

32. (Amended) A method of measuring glucose in a biological fluid, comprising the steps of:

a) providing a host:

b) providing an implantable device comprising a sensor capable of continuous glucose sensing, said sensor having an interface tip;

c) implanting said device subcutaneously into tissue of said host so as to elicit a foreign body capsule as a result of the response of said host to the introduction of said implantable device, said sensor interface tip communicating with the tissue of said host such that said tip is substantially fixated in said foreign body capsule.

Please add the following new claims 33-42:

33. (New) A method according to claim 32, wherein said device is wholly implanted subcutaneously in said host.

34. (New) A method according to claim 32, wherein said sensor tip is substantially fixated in said foreign body capsule by the provision of a capsular attachment layer on said sensor.

35. (New) A method according to claim 34, wherein said sensor tip is further substantially fixated by the provision of an angiogenic layer on said sensor.

36. (New) A method according to claim 34, wherein said capsular attachment layer is non-smooth.

37. (New) A method according to claim 36, wherein said non-smooth layer includes surgical grade polyester velour.

38. (New) A method of monitoring glucose levels, comprising:

a) providing i) a host, and ii) a device comprising a housing and a sensor capable of continuous glucose sensing, said sensor including a vascularization promotion layer; and

b) wholly implanting said device subcutaneously in said host under conditions such that said device provides continuous glucose sensing.

39. (New) A method according to claim 38, wherein said vascularization promotion layer is an angiogenic layer.

40. (New) A method according to claim 38, wherein said sensor further includes a capsular attachment layer.

41. (New) A method according to claim 38, wherein said implant is sized and configured for being wholly implanted subcutaneously.

42. (New) A method according to claim 41, further including the step of transmitting data from said wholly implanted device telemetrically.